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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,866	10/20/2003	Masahiko Saito	056207.50333C1	2063

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CROWELL & MORING LLP
INTELLECTUAL PROPERTY GROUP
P.O. BOX 14300
WASHINGTON, DC 20044-4300

EXAMINER	
PHAM, TOAN NGOC	

ART UNIT	PAPER NUMBER
2632	

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/687,866	SAITO ET AL.	
	Examiner	Art Unit	
	Toan N Pham	2632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-11 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-11 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 10/20/2003.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imajo (US 4,989,146).

Regarding claim 1: Imajo discloses an automotive trouble diagnosing system in which the automotive trouble diagnosing system (T) includes multiple sensors for sensing a variety of vehicle operating system including vehicle fuel injection, spark plugs, valves, pumps, electric motor, alternator, engine speed, engine temperature, engine vibration, battery and lamps (col. 3, lines 15-39); thus, these systems are met by the engine ignition, charging system, fuel system, cooling system and power transmission system. Imajo does not disclose the oil lubricating system; however, it would have been obvious that the oil lubricant is part of the vehicle engine operating system discussed above. Imajo also discloses the detected diagnosis trouble is transmitted to the head office by the vehicle telephone (10), met by the maintenance agency. The head office, then in turns, transmit the diagnosis fault with respect to a particular parts that is in need or repairing to the service factory (B), met by the service company which provides maintenance service to the vehicle (col. 4, lines 8-43).

Regarding claim 2: Imajo discloses an automotive trouble diagnosing system in which the automotive trouble diagnosing system (T) includes multiple sensors for

sensing a variety of vehicle operating system including vehicle fuel injection, spark plugs, valves, pumps, electric motor, alternator, engine speed, engine temperature, engine vibration, battery and lamps (col. 3, lines 15-39); thus, these systems are met by the engine ignition, charging system, fuel system, cooling system and power transmission system. Imajo does not disclose the oil lubricating system; however, it would have been obvious that the oil lubricant is part of the vehicle engine operating system discussed above. Imajo also discloses the detected diagnosis trouble is transmitted to the head office by the vehicle telephone (10), met by the maintenance agency. The head office, then in turns, transmit the diagnosis fault with respect to a particular parts that is in need or repairing to the service factory (B), met by the service company which provides maintenance service to the vehicle (col. 4, lines 8-43). Imajo also discloses estimating the maintenance cost with respect to parts and labor and the driver selects the maintenance agency by selecting the closest agency (col. 4, lines 23-43).

Regarding claim 3: Imajo discloses an automotive trouble diagnosing system in which the automotive trouble diagnosing system (T) includes multiple sensors for sensing a variety of vehicle operating system and stores in memory device (2), met by the data karte (col. 3, lines 40-63). Imajo also discloses the detected saved diagnosis trouble is transmitted to the head office by the vehicle telephone (10). The head office, then in turns, transmit the diagnosis fault with respect to a particular parts that is in need or repairing to the service factory (B), met by the service company which provides maintenance service to the vehicle (col. 4, lines 8-43). Imajo also discloses estimating

the maintenance cost with respect to parts and labor and the driver selects the maintenance agency by selecting the closest agency (col. 4, lines 23-43). Imajo does not disclose inspection as a maintenance work; however, it would have been obvious that if a vehicle is brought into service, an inspection to the vehicle is provided to ensure that the vehicle is operating efficiently and safely.

Regarding claim 4: Imajo discloses an automotive trouble diagnosing system in which the automotive trouble diagnosing system (T) includes multiple sensors for sensing a variety of vehicle operating system and stores in memory device (2), met by the data karte (col. 3, lines 40-63). Imajo also discloses that the engine stall history is also stored in the memory device (2) (col. 5, lines 44-60; col. 6, lines 4-24); thus, since memory (2) is used to stored diagnostic fault data; the present or recent data and history data are all stored in the memory device (2); therefore, it would have obvious that the past and present diagnostic data are stored in the memory device (2). Imajo also discloses the detected saved diagnosis trouble is transmitted to the head office by the vehicle telephone (10). The head office, then in turns, transmit the diagnosis fault with respect to a particular parts that is in need or repairing to the service factory (B), met by the service company which provides maintenance service to the vehicle (col. 4, lines 8-43). Imajo also discloses estimating the maintenance cost with respect to parts and labor and the driver selects the maintenance agency by selecting the closest agency (col. 4, lines 23-43). Imajo does not disclose inspection as a maintenance work; however, it would have been obvious that if a vehicle is brought into service, an

inspection to the vehicle is provided to ensure that the vehicle is operating efficiently and safely.

Regarding claim 5: Imajo discloses the automotive trouble pre-diagnosing device (T) including the microprocessor (1) and memory (2) which memorizes the possible trouble diagnostic state (col. 1, lines 35-40); thus, it would have been obvious that the microprocessor which controls the memory obviously recognizes or judged the fault level.

Regarding claims 6, 7, 10 and 11: See the limitations of claim 3 above.

Regarding claim 8: Imajo discloses the control system includes body control and information control (col. 3, lines 20-49).

Regarding claim 9: Imajo discloses the automotive trouble pre-diagnosing device (T) including the microprocessor (1) and memory (2) which memorizes the possible trouble diagnostic state (col. 1, lines 35-40); thus, these are set data which the microprocessor relies on to determined the ordinary and trouble condition of the vehicle operation.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan N Pham whose telephone number is (571) 272-2967. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 27, 2004

TOAN N. PHAM
PRIMARY EXAMINER